

RESOLUTION NO. 2010-47

**A RESOLUTION OF THE VILLAGE COUNCIL OF THE
VILLAGE OF KEY BISCAYNE, FLORIDA, APPROVING AN
AGREEMENT (MEMORANDUM OF UNDERSTANDING)
BETWEEN THE VILLAGE OF KEY BISCAYNE AND THE
NATIONAL PARK SERVICE (BISCAYNE NATIONAL PARK)
FOR SEAGRASS RESTORATION WITHIN BISCAYNE
NATIONAL PARK AS MITIGATION FOR BEACH
RESTORATION IMPACTS; PROVIDING AN EFFECTIVE
DATE.**

WHEREAS, the Village conducted a beach renourishment project within its jurisdiction in 2002; and

WHEREAS, the renourishment project resulted in impacts to seagrass habitat, for which in-kind mitigation was required by the Florida Department of Environmental Protection (FDEP), the US Army Corps of Engineers (Corps) and the Miami-Dade County Department of Environmental Resources Management (DERM); and

WHEREAS, a substantial part of the required mitigation has been completed but, to date, 0.3 acre of the required mitigation remains to be completed; and

WHEREAS, the National Park Service (Biscayne National Park) and the Village have agreed to collaborate on a project (Project) to restore 0.3 acre of impacted seagrasses within the boundaries of Biscayne National Park; and

WHEREAS, the Project, as designed, is the result of ongoing discussions among the Park, the Village and its consultants, and the FDEP, which have taken place over the past year; and

WHEREAS, the Project will result in the restoration of seagrass habitat in Biscayne National Park for which federal funding is otherwise unavailable, as well as satisfaction of the Village's remaining mitigation requirements for the aforementioned agencies; and

WHEREAS, the Project mitigation plan has been approved by FDEP and the Park as appropriate for restoration and satisfaction of mitigation obligations; and

WHEREAS, the actual work implementing and monitoring the success of the Project will be done by the National Park Service, with oversight by the Village's consultants; and

WHEREAS, the Project will be funded by the Village and the necessary funds are available in the Village budget; and

WHEREAS, the Village Council finds that participation in the Project in accordance with the terms and requirements set forth in the Memorandum of Understanding is in the best interest of the Village.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE VILLAGE OF KEY BISCAYNE, FLORIDA, AS FOLLOWS:

Section 1. Recitals Adopted. Each of the above stated recitals are hereby adopted, confirmed and incorporated herein.

Section 2. Agreement Approved. That the Memorandum of Understanding (MOU), in substantially the form attached hereto, is hereby approved and the Village Manager is authorized to execute the MOU on behalf of the Village.

Section 3. Village Manager Authorized. That the Village Manager is further authorized to execute all documents necessary to implement the MOU on behalf of the Village.

Section 4. Village Manager and Attorney to Implement. That the Village Manager and Village Attorney are authorized to take any and all action necessary to implement the MOU.

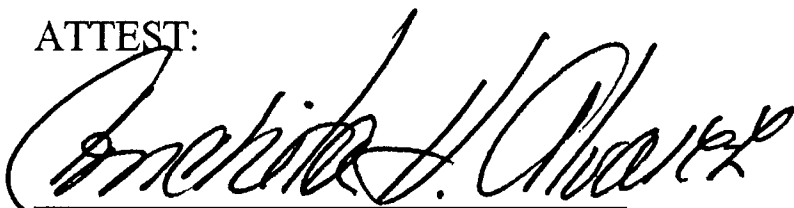
Section 5. Effective Date. This Resolution shall be effective immediately upon adoption.

PASSED AND ADOPTED this 26th day of October, 2010.



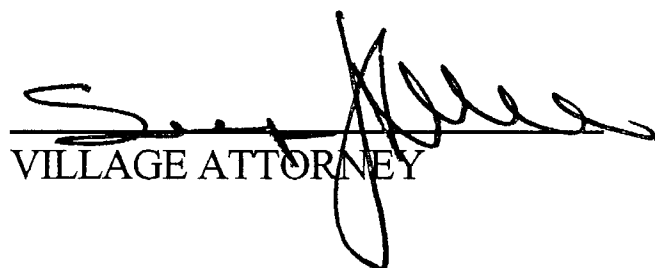
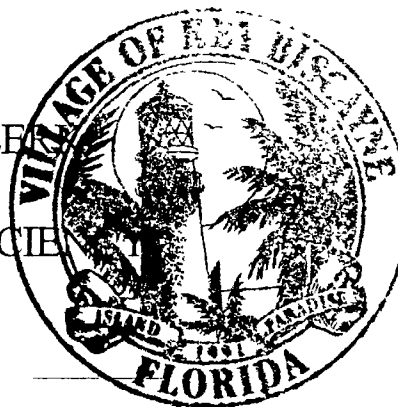
MAYOR ROBERT L. VERNON

ATTEST:



CONCHITA H. ALVAREZ, MMC, VILLAGE CLERK

APPROVED AS TO FORM AND LEGAL SUFFICIENCY


VILLAGE ATTORNEY

MEMORANDUM OF UNDERSTANDING
Between the
NATIONAL PARK SERVICE
BISCAYNE NATIONAL PARK
And
THE VILLAGE OF KEY BISCAYNE

This Memorandum of Understanding (MOU) is entered into between the National Park Service (NPS), a bureau of the United States Department of the Interior (Department), and the Village of Key Biscayne (Village), a Florida municipal corporation, for the purpose of collaborating with Biscayne National Park (Park).

Article I. Background and Objectives

The Park is one of the largest marine parks in the National Park System and was established to preserve and protect a rare combination of terrestrial, marine, and amphibious life for the enjoyment of present and future generations.

Seagrass meadows are an important nearshore habitat type located within the Park. Shallow seagrass habitat in the Park is frequently impacted by vessel groundings. These incidents create specific types of injuries to these resources, including propeller scars, blowholes, and berms. Natural recovery from grounding injuries may take months to over a decade or longer, especially when the injury extends deep into the sediment. The Park's general objectives for restoring vessel grounding injuries in seagrass habitat include restoring topographic elevation at those sites with substantial sediment excavation, restoring seagrass coverage of injured and backfilled areas, and encouraging seagrass recruitment into injured and backfilled areas. These objectives are accomplished by placing sediment fill, transplanting seagrasses, and applying nutrients via bird stakes and fertilizer application.

The NPS estimates that less than ten percent of grounding incidents in the Park are reported. Thus there are a large number of grounding injuries for which no responsible party is known, and the Park refers to these as "orphan sites". Opportunities and funding for the restoration of orphan sites are extremely limited.

The Village conducted an authorized beach renourishment project within its jurisdiction in 2000, under the following permits:

- Miami-Dade County Department of Environmental Resources Management (DERM) Class I Coastal Construction Permit # CC99-347
- United States Army Corps of Engineers (COE) Individual Permit # 199904294 (IP-DSG)
- Florida Department of Environmental Protection (FDEP) Joint Coastal Permit # 0160856-001-JC

The renourishment project resulted in impacts to seagrass habitat, for which in-kind mitigation was required to restore the functional services of seagrass habitat impacted by the renourishment project. To date, 0.3 acre of the required mitigation remains to be completed.

The Park and the Village intend to collaborate on a project (Project) to restore 0.3 acre of vessel grounding injuries of unknown origin (orphan sites) - in seagrass habitat within the Park. The Project, as designed, is the result of ongoing discussions among the Park, the Village and its contractors, and FDEP, which have taken place over the past year. The Project will result in the restoration of seagrass habitat in the Park for which funding is otherwise unavailable, as well as the satisfaction of the Village's remaining mitigation requirements for the aforementioned permits.

The Project will take place on or immediately adjacent to "No Name Shoal" in the Park, a seagrass bank located at approximately 25.57446 N, -080.27194 E, with numerous injuries from multiple vessel groundings. In May, 2010, the Village and its contractors conducted aerial and field surveys to identify specific injuries for inclusion in the Project. A total of 17 blowholes and depressions identified in these surveys were selected for restoration in the Project. The 17 individual injuries range in size from 20 m² to over 230 m² and cover a total of 0.3 acre (1,214 m²). These were proposed for restoration in an amended mitigation plan and have been approved by FDEP and the Park as appropriate for restoration. The seventeen sites are depicted on Exhibit A with corresponding latitude and longitude coordinates denoted.

The restoration involves re-establishment of topographic elevation at the orphan sites and provision of nutrients via bird stakes with the objective of encouraging seagrass recruitment into the backfilled areas. The objective will be accomplished by placement of sediment fill into excavations and installation of bird roosting stakes in the filled sites. Sediment placement into blowholes or deep propeller scars returns the seafloor to its original grade and composition, stabilizes the substrate to prevent further deterioration from erosion, and prepares the area for colonization by seagrasses and macroalgae. Bird stakes placed in restoration areas encourages roosting of waterfowl, which ensures the regular release of natural fertilizer over the sea floor beneath the stakes, to enhance recolonization by seagrasses and macroalgae. It is estimated that approximately 600 cubic yards of fill and approximately 300 bird stakes will be needed to achieve the stated restoration objective of the Project. Restoration work will be contracted out by NPS. Project management, contract oversight, and restoration monitoring will be conducted by the Park.

As part of the Project, one Class II Private Aid to Navigation (PATON) will be installed prior to the completion of restoration activities at the eastern end of "No Name Shoal", serving to mark the shoal and reduce the risk of damage to the restoration efforts. The PATON will be a "danger shoal" day board with a white flashing light on a 4-second interval. The Park has received conceptual approval from the U.S. Coast Guard (USCG) on the type and location of the

PATON. PATON installation will be contracted out by NPS and maintained by the Park. The PATON will require a USCG permit that will be obtained by the Park.

The purpose of this MOU is to establish the terms through which the Park and the Village will accomplish the Project.

Article II. Statutory Authority

The NPS enters into this Agreement pursuant to the following legal authorities:

16 U.S.C. § 1-3 – General Authority to Take Actions That Promote and Regulate Units of the National Park System

The NPS Organic Act directs the Secretary of the Interior to promote and regulate National Park System lands by such means and measures as to conform to the fundamental purpose of such lands, namely conservation of the scenery and natural and historic objects and wildlife therein, and to provide for the enjoyment of these resources in a manner and by such means as will leave them unimpaired for the enjoyment of future generations.

16 U.S.C. § 6, 43 U.S.C. § 1473a – Authority to Accept Donations

The Secretary of the Interior in his administration of the National Park Service is authorized, in his discretion, to accept patented lands, rights-of-way over patented lands or other lands, buildings, or other property within the various national parks and national monuments, and moneys that may be donated for the purposes of the national park and monument system.

Authority to Expend Donated Funds: As a general rule, NPS may expend donated funds, and use donated goods and services, for any activity for which appropriated funds may be used, subject to the limitations noted in § 6.2 of Director's Order 21 (DO #21). Authority to expend appropriated funds may, as appropriate, be derived from many sources including the NPS Organic Act (16 U.S.C. §§ 1-4) and park-specific legislation. Be aware that park-specific and other specific legislation may restrict NPS' ability to rely on more general statutes, such as the NPS Organic Act, for legal authority to expend funds on certain activities.

Article III. Responsibilities and Understandings of the Parties

A. The NPS and Village jointly agree to:

1. Work together, in good faith, for the benefit of the Park and the Village to

accomplish the objectives articulated in this Agreement, ensure the success of the relationship established by this Agreement, and identify other opportunities for productive collaboration.

2. Ensure frequent and regular communications and actively participate in these communications. The communications shall concern all matters under this Agreement, including without limitation, the respective goals and responsibilities of the parties.
3. Work together, in good faith, to promptly resolve differences at the level of the Key Officials listed in Article V of this Agreement, prior to elevating matters within the organization of either party, the Department, or the United States.

B. The NPS agrees to:

1. Project Contracting: Within 30 days of the date hereof, the contract package will be submitted by the Park into the NPS contracting system. The anticipated procurement acquisition lead time is then approximately 90-120 days to an award. The Park will notify the Village if this timeframe will not be met and will provide the Village with a new anticipated timeframe. Park staff will develop, compete, award, and administer the restoration and PATON installation contract packages.

In the event that bids, proposals or change orders are received by the Park that differ in scope or exceed the initial budgeted amount of \$298,198 (for restoration) and \$4,000 (for PATON cost and installation), or the annual budgeted amounts set for in subparagraph 7 hereof, then the Park will not award said contract/s unless the Park and the Village agree, by written amendment to this agreement.

The restoration contract will include the following work elements:

- Planning meeting, site visit/s
- Implementation plan, draft and final
- Fill placement
- Bird stake and restoration signage fabrication and placement
- Restoration completion report, draft and final

The marker installation contract will include the following work elements:

- Planning meeting/site visit
- Equipment procurement
- Equipment installation

Price and the following technical evaluation criteria to evaluate bids:

- Recent specialized experience
- Professional qualifications
- Past performance

2. Contractor Oversight: Park staff will provide careful oversight of restoration and marker contractors, to ensure that the work is implemented correctly and efficiently and with minimal collateral resource injury. The Village shall be notified of the oversight activities proposed by the Park in sufficient time to allow, but not require, the Village to participate or observe such oversight efforts. nothing herein should be construed to constitute any obligation on the part of the Village to participate in such oversight. However, nothing contained herein shall be construed for such coordination to delay Park activities undertaken under the terms of this agreement.

3. Restoration Monitoring and Reporting: Monitoring will be conducted by Park staff and/or its contractors for up to 5 years or until the “success criteria” are met. The monitoring schedule will include a “time zero” event (immediately following restoration) and annual monitoring surveys to document sediment stability and colonization of the restoration sites by seagrass and calcareous green algae. Approximately 10% of each injury will be monitored, using randomly-placed square 0.25 m² quadrats. The equivalent area of undisturbed adjacent reference habitat will also be monitored. In each monitoring quadrat, a modified Braun-Blanquet scale will be used to estimate the cover/abundance of seagrass and macroalgae. In 50% of the injury and reference quadrats per feature, *Thalassia testudinum* short shoots will also be counted from within one corner of the quadrat equal to 0.0625- m² in size. At each monitoring event, qualitative observations of sediment and bird stake stability will also be noted to determine if any significant physical changes have occurred within the mitigation area. Qualitative digital photographs and/or video data will be also be collected to document the site conditions and seagrass recovery.

The Park agrees to notify the Village of the time schedule for annual monitoring in sufficient time to allow the Village to participate or observe the monitoring event. However, nothing contained herein shall be construed for such coordination to delay Park activities undertaken under the terms of this agreement.

The Park will present the results of monitoring data collection and describe the current site conditions in one monitoring report per annual monitoring event, for timely submission to the Village and FDEP.

At the end of the 5-year monitoring period, the success of the Project will be evaluated using one of the following two definitions:

Definition 1:

- *T. testudinum* density (shoots/m²) reaches 50% or greater within the restoration sites compared to the reference sites.

Definition 2:

- *T. testudinum* density (shoots/m²) reaches 30% or greater within the treatment sites compared to the reference sites
- *T. testudinum* density (shoots/m²) demonstrates a trending increase at a 95% confidence level
- the total coverage-abundance estimates of all seagrass and calcareous green algae species reaches 60% or greater than those of the reference sites.

4. Marker Inspection/Maintenance: Park staff will inspect the PATON twice annually and maintain it as needed for a five-year period following installation, to ensure proper performance. The Park agrees to notify the Village of the time schedule for this monitoring in sufficient time to allow the Village to participate or observe the monitoring event. However, nothing contained herein shall be construed for such coordination to delay Park activities undertaken under the terms of this agreement.

5. Summary Reporting: The Park will submit annual financial reports to the Village that provide a summary of activities conducted, expenditure of donation funds to date, and suggested budget modifications for subsequent Project years as needed.

6. Additional remedial effort: in the event, for whatever the reason, the initial restoration efforts do not achieve the success criteria or are clearly not trending towards success, as noted above, and one additional remediation effort is required by the FDEP, pursuant to paragraph c.5 below, the Park agrees to allow such additional remediation, subject to the Village and the Park reaching written agreement regarding the budget for such additional event.

7. Budget: The Park has developed the following budget for the Project. This is an estimate and is based on the Park's extensive experience implementing and monitoring similar seagrass restoration projects.

BISC - VKB SEAGRASS RESTORATION BUDGET				YR 1		YR 2		YR 3		YR 4		YR 5		YR 6		TOTALS		
NPS Oversight/Monitoring		Description		Estimated Rate		Cost	LOE	Cost	LOE	Cost	LOE	Cost	LOE	Cost	LOE	Cost	LOE	Line Item Cost
Ecologist (GS-12)	Project mgmt/oversight	\$104,838	per year	\$20,968	20%	\$3,302	3%	\$3,460	3%	\$3,617	3%	\$3,774	3%	\$3,931	3%	\$39,052		
Biologist (GS-9)	Field ops oversight/reporting	\$67,775	per year	\$13,555	20%	\$2,135	3%	\$2,237	3%	\$2,338	3%	\$2,440	3%	\$2,542	3%	\$25,246		
Biol Sci Technician (GS-7)	Field/monitoring	\$55,408	per year	\$8,311	15%	\$6,981	12%	\$7,314	12%	\$7,646	12%	\$7,979	12%	\$8,311	12%	\$46,543		
Biol Sci Technician (GS-6)	Field/monitoring	\$49,861	per year	\$7,479	15%	\$6,282	12%	\$6,582	12%	\$6,881	12%	\$7,180	12%	\$7,479	12%	\$41,883		
Res. Mgmt. Division Chief	Program oversight	\$116,876	per year	\$1,169	1%	\$1,227	1%	\$1,286	1%	\$1,344	1%	\$1,403	1%	\$1,461	1%	\$7,889		
Seagrass Monitoring Expert	Monitoring design, data	\$160,229	per year	\$1,602	1%	\$1,682	1%	\$1,763	1%	\$1,843	1%	\$1,923	1%	\$2,003	1%	\$10,815		
Equipment	Misc supplies, gear	1	lump sum	\$1,000	LS	\$500	LS	\$500	LS	\$500	LS	\$500	LS	\$500	LS	\$3,500		
Vessel Costs	Travel to/fr restoration sites	\$55	1hr/day	\$3,300	60 days	\$1,100	20 days	\$1,100	20 days	\$1,100	20 days	\$1,100	20 days	\$1,100	20 days	\$8,800		
			Subtotal:	\$57,384		\$23,211		\$24,240		\$25,269		\$26,298		\$27,327		\$183,729	Total	
Marker				Cost	LOE	Cost	LOE	Cost	LOE	Cost	LOE	Cost	LOE	Cost	LOE	Line Item Cost		
Contract	Includes purchase/install	1	lump sum	\$4,000	LS	--	--	--	--	--	--	--	--	--	--	\$4,000		
Maintenance Technician	Marker inspect/maint	\$31	per hour	--	--	\$248	8 hrs	\$260	8 hrs	\$273	8 hrs	\$285	8 hrs	\$298	8 hrs	\$1,364		
Maintenance Technician	Marker inspect/maint	\$23	per hour	--	--	\$184	8 hrs	\$193	8 hrs	\$202	8 hrs	\$211	8 hrs	\$220	8 hrs	\$1,010		
Vessel Costs	Travel to/fr marker site	\$78	3hr/day	--	--	\$468	6 hrs	\$491	6 hrs	\$515	6 hrs	\$538	6 hrs	\$562	6 hrs	\$2,574		
			Subtotal:	\$4,000		\$900		\$945		\$990		\$1,035		\$1,080		\$8,948	Total	
Restoration Contract				Cost	QTY											Line Item Cost		
Planning Meeting		1	lump sum	\$10,000	LS													
Implementation Plan		1	lump sum	\$10,000	LS													
Fill		\$433	per cy	\$262,138	605.4 cy													
Stakes		\$20	per stake	\$6,060	303 stakes													
Completion Report		1	lump sum	\$10,000	LS													
			Subtotal:	\$298,198												\$298,198	Total	
BUDGET SUMMARY BY YEAR				\$359,582 Yr. 1		\$24,110 Yr. 2		\$25,185 Yr. 3		\$26,259 Yr. 4		\$27,333 Yr. 5		\$28,407 Yr. 6		\$490,875 Project Total		
BUDGET SUMMARY BY CATEGORY				NPS Contracting, Implementation, Monitoring Shoal Marker Contract and Maintenance Restoration Contract PROJECT TOTAL:													\$183,729 \$8,948 \$298,198 \$490,875 Project Total	

C. The Village agrees to:

1. Donate funds in the total amount of **\$490,875** to Biscayne National Park to support the Project. These funds will be donated in annual increments at the start of each Project year (with the first installment to be made by execution date of this Agreement) according to the budget estimate provided in this Agreement:

Yr. 1	\$359,582
Yr. 2	\$24,110
Yr. 3	\$25,185
Yr. 4	\$26,259
Yr. 5	\$27,333
Yr. 6	\$28,407
Total Donation	\$490,875

Should actual Project costs vary, donation amounts for subsequent Project years may be adjusted accordingly by agreement of the parties in writing. The Village understands that Project year work may not commence until funds for that year have been donated and that work will not continue if funds are not received.

2. For Project planning purposes, the Village has provided the complete survey results from the field assessment conducted by the Village and its contractors for the seventeen selected mitigation sites at No Name Shoal.
3. The Village has developed monitoring parameters and success criteria that are acceptable to FDEP and the Park and a copy of the document evincing FDEP's approval is attached hereto as Exhibit "B".
4. Notify the Park in a timely fashion of any issues and concerns related to the annual monitoring reports and interpretations of Project success.
5. Implement one remedial effort to offset any shortfalls of the Project if either of the following occur:
 - Monitoring data do not support one of the two success definitions
 - at any point during the monitoring period, an unanticipated event substantially alters the physical site conditions, thereby limiting or preventing natural re-colonization of the mitigation sites.

The nature, scale and scope of the remedial actions will be dependent on the level at which Project success was not met. Should such additional remedial action be needed, the Village will seek the approval of the proposed additional remedial action from the FDEP and a modification to this MOU will be prepared for approval by the Park and the Village.

Article IV. Term of Agreement

Unless earlier terminated by operation of the terms of this Agreement, or by agreement of the parties in writing, this Agreement will be in effect for a period of six (6) years beginning on the date the last signature is affixed to this Agreement or at such earlier time as the success criteria are achieved.

Anticipated Project activities by year are as follows, with an anticipated start date of November, 2010.

- Year 1: Restoration contracting and/or implementation of: 1) restoring the seventeen selected sites using the approved methods described in the Village's FDEP-approved addendum to the restoration and mitigation plan; 2) the PATON marker installation; and 3) baseline monitoring conducted by the Park.
- Years 2-6: Annual monitoring of restoration area and biannual inspection and maintenance of PATON.

Article V. Termination

Either Party may terminate this Agreement for default in the terms hereof but only after the non-defaulting party notifying the other party of such default, in writing, and by providing thirty (30) days written notice setting forth the reasons for proposing termination and giving the other party thirty (30) days to cure said default.

Article VI. Key Officials and Notices

A. Key Officials

The personnel specified below are considered essential to the successful coordination and communication between the Village and the Park for the work to be performed pursuant to this Agreement. Upon written notice to the other party, either party may designate an alternate to act in the place of the designated Key Official, or designated a new Key Official.

For Biscayne National Park:

Mark Lewis or his successor
Superintendent
Biscayne National Park
9700 SW 328 Street
Homestead, Florida 33033
305-230-1144 phone
305-230-1190 fax
Mark_lewis@nps.gov email

For the Village of Key Biscayne:

Genaro "Chip" Iglesias or his successor
Village Manager
Village of Key Biscayne
88 West McIntyre Street
Key Biscayne, FL 33146
305-365-5511 phone
305-365-8936 fax
chip@keybiscayne.fl.gov email

B. Notices

Any notice from one party to all the other parties related to this Agreement shall be in writing and delivered by mail, personal delivery, electronic delivery or other appropriate means, to the first Key Official of the other party at the address or contact number indicated above, or at such other address or contact number for such Key Official as may be provided by the other party from time to time, and shall be considered delivered upon receipt at the office of such Key Official.

Article VII. Required Clauses

- A. Non-Discrimination:** All activities pursuant or in association with this Agreement shall be conducted in compliance with the requirements of Executive Order 11246; Title VI of the Civil Rights Act of 1964, as amended (78 Stat. 252; 42 U.S.C. § 2000d et seq.); Title V, Section 504 of the Rehabilitation Act of 1973 (87 Stat. 394; 29 U.S.C. § 794); the Age Discrimination Act of 1975 (89 Stat. 728; 42 U.S.C. §§ 6101 et seq.); and with all other federal laws and regulations prohibiting discrimination on grounds of race, color, sexual orientation, national origin, disabilities, religion, age, or sex.

- B. NPS Appropriations:** Pursuant to 31 U.S.C. § 1341, nothing contained in this Agreement shall be construed to obligate the Department of the Interior or the United States to any current or future expenditure of funds in advance of the availability of appropriations from Congress. Nor does this Agreement obligate the Department of the Interior or the United States to spend funds on any particular project or purpose, even if funds are available.
- C. Prior Approval:** The Village shall obtain prior written approval from the NPS before:
1. Holding special events within the Park;
 2. Entering into third-party agreements of a material nature regarding the Park;
 3. Assigning or transferring this Agreement or any part thereof;
 4. Constructing any structure or making any improvements within the Park's boundaries;
 5. Releasing any public information that refers to the Department, the NPS, the Park, any NPS employee (by name or title), this Agreement or the Project contemplated hereunder. However, in the event the information requested qualifies as a "public record", under the provisions of Chapter 119, Florida Statutes, the Village may provide those records without written approval from the NPS, but shall also notify the NPS of the request and by providing copies of the requested information to the NPS.
- D. Compliance with Applicable Laws:** This Agreement and performance hereunder is subject to all laws, regulations and management policies including those governing the NPS property and resources, whether now in force or hereafter enacted or promulgated. Nothing in this Agreement shall be construed as in any way impairing the general powers of the NPS for supervision, regulation, and control of its property under such applicable laws, regulations, and management policies. Nothing in this Agreement shall be deemed inconsistent with or contrary to the purpose of or intent of any Act of Congress.
- E. Limitation on Lobbying:** The Village will not undertake activities, including lobbying for proposed Village or NPS projects or programs, that seek to either: (1) alter the appropriation of funds included in the President's budget request to Congress for the Department of the Interior or another federal agency that holds funds for the sole benefit of the NPS under Congressionally authorized programs, including the Federal Lands Highway Program; or (2) alter the allocation of such appropriated funds by NPS or another Federal agency. Nothing in this paragraph is intended to preclude the Village from applying for and obtaining a competitive or non-competitive grant of Federal financial assistance from a Federal agency, or from undertaking otherwise lawful activities with respect to any Village or NPS activity, project or program included in the President's budget request to Congress. Nothing in this paragraph should be construed as NPS requesting, authorizing or supporting advocacy by nonfederal entities before Congress or any other government official. Except as provided herein and in applicable

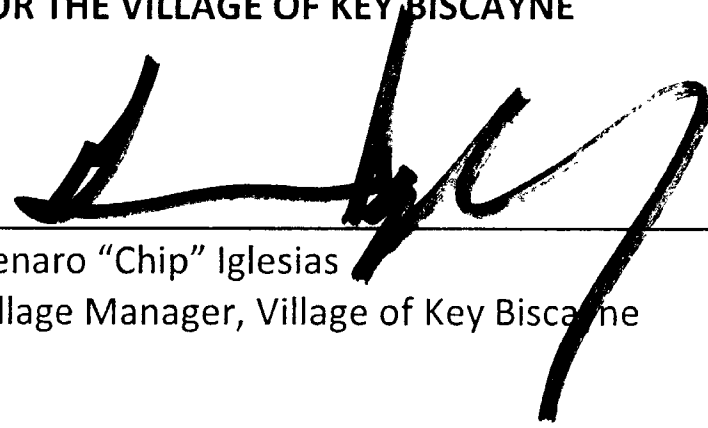
laws, nothing in this paragraph shall be construed to curtail the Village's ability to interact with elected or appointed officials.

- F. **Disclaimers of Government Endorsement**: The Village will not publicize or circulate materials (such as advertisements, solicitations, brochures, press releases, speeches, pictures, movies, articles, manuscripts, or other publications), suggesting expressly or implicitly, that the Government, the Department, NPS, or Government employees endorse the Village's business, goods, or services. All materials referring to the Government must be approved by the NPS Key Official prior to publication. Nothing herein is intended to prevent the NPS or the Department of the Interior from recognizing the Village or contributions made by the Village to NPS, and from authorizing an inclusion of such recognition in materials generated by the Village related to this Agreement.
- G. **Modifications**: This Agreement may be extended, renewed or amended only when agreed to in writing by the NPS and the Village.
- H. **Waiver**: Failure to enforce any clause of this Agreement by either party shall not constitute waiver of that clause. Waivers must be express and evidenced in writing.
- I. **Agency**: The Village is not an agent or representative of the United States, the Department of the Interior, or the NPS, nor will the Village represent itself as such to third parties. The NPS is not an agent or representative of the Village, nor will the NPS represent itself as such to third parties.
- J. **Partial Invalidity**: If any provision of this Agreement or the application thereof to any party or circumstance shall, to any extent, be held invalid or unenforceable, the remainder of this Agreement or the application of such provision to the parties or circumstances other than those to which it is held invalid or unenforceable, shall not be affected thereby and each provision of this Agreement shall be valid and be enforced to the fullest extent permitted by law.

Article VIII. Signatures

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the dates set forth below.

FOR THE VILLAGE OF KEY BISCAYNE



Genaro "Chip" Iglesias
Village Manager, Village of Key Biscayne

10/28/10
Date

FOR THE NATIONAL PARK SERVICE



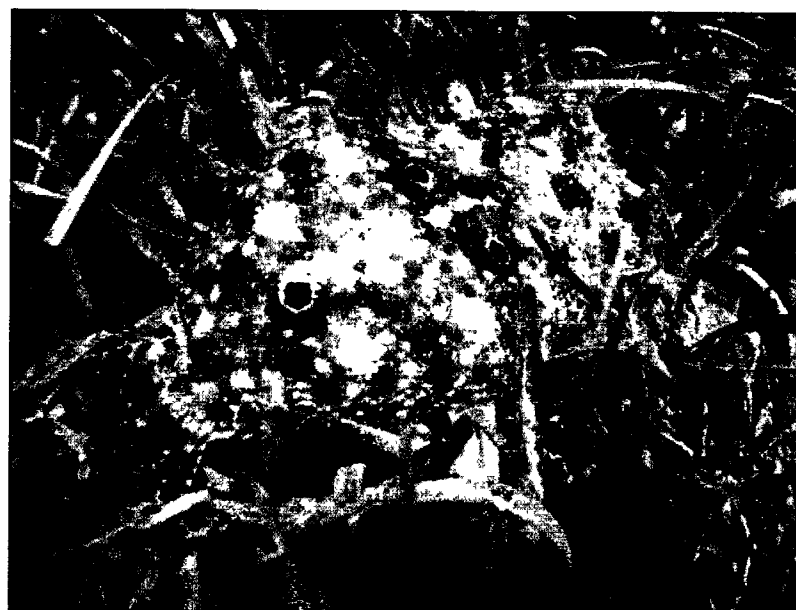
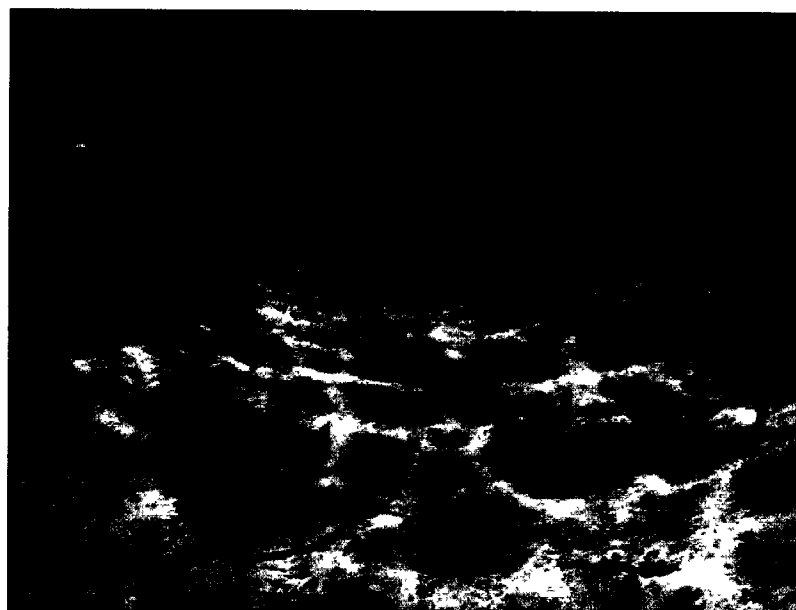
Mark Lewis
Superintendent, Biscayne National Park

11/3/10
Date

Addendum to Seagrass Restoration and Mitigation Plan: Village of Key Biscayne

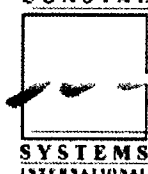
Second Revision

July 2010



Prepared for:

COASTAL

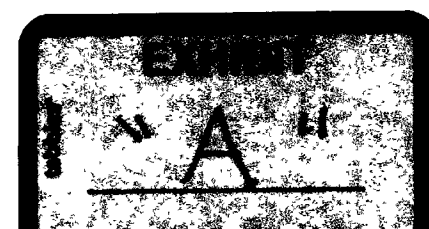


Ms. Penny Cutt
Environmental/Permitting Regional Manager
Coastal Systems International, Inc.
2047 Vista Parkway, Suite 101
West Palm Beach, Florida 33411

Prepared by:



CSA International, Inc.
8502 SW Kansas Avenue
Stuart, Florida 34997
Telephone: 772-219-3000



Addendum to Seagrass Restoration and Mitigation Plan: Village of Key Biscayne

Second Revision

July 2010

Prepared for:



Ms. Penny Cutt
Environmental/Permitting Regional Manager
Coastal Systems International, Inc.
2047 Vista Parkway, Suite 101
West Palm Beach, Florida 33411

Prepared by:



CSA International, Inc.
8502 SW Kansas Avenue
Stuart, Florida 34997
Telephone: 772-219-3000

Background

Since 2008, the Village of Key Biscayne (VKB) and CSA International, Inc. (CSA) have submitted two mitigation and restoration plans with a goal of meeting the 1.33 acres of required mitigation. In October 2009, CSA submitted the Seagrass Restoration and Mitigation Plan: Village of Key Biscayne, Second Revision (SRMP) (CSA International, Inc., 2009) describing the overall mitigation and monitoring program including those activities completed in 2008 and proposed additional in-kind seagrass mitigation. In November 2009, Florida Department of Environmental Protection (FDEP) authorized CSA and the VKB to proceed with additional in-kind seagrass mitigation (sediment fill) and the associated monitoring approaches as proposed in the SRMP. In March 2010, CSA completed 0.61 acre of authorized seagrass mitigation, an increase over the anticipated acreage, providing a total of 1.01 acres of seagrass mitigation undertaken to date, leaving 0.30 acre outstanding.

Section 3.2 of the SRMP, *Alternatives for Meeting the Outstanding Mitigation*, presented a range of options and the preferred alternative to address the mitigation balance; however, FDEP determined that the preferred alternative (out-of-kind mitigation) would not meet the objectives of the program. To date, a complete mitigation plan has not been approved. In order to find an acceptable approach, VKB, FDEP, Coastal Systems International, Inc. (CSI), Biscayne National Park (BISC), and CSA have been coordinating to develop an in-kind seagrass mitigation project within BISC that would meet FDEP requirements. The purpose of this addendum is to provide information specific to the BISC in-kind restoration project so that a final mitigation plan can be approved and replace Section 3.2 of the SRMP (CSA International, Inc., 2009).

Biscayne National Park In-Kind Seagrass Mitigation

In February 2010, BISC provided a mitigation project outline on the process, location, general approach, monitoring, shoal marking, and roles of the National Park Service (NPS) relative to this project. The location, referred to as “No Name Shoal,” is a seagrass bank located at approximately 25.57446 N, -80.27194 E and is scarred with numerous seagrass injuries from multiple vessel groundings. Several scenarios were discussed regarding restoration methods that could be applied in this area including seagrass transplantation, fertilization (bird stakes), and topographic restoration (sediment fill). It was determined that topographic restoration would most likely provide the best project in terms of mitigation credit and overall project value, and any survey would likely be focused primarily on sites that would benefit from sediment fill.

Site Surveys

To verify the suitability of sites for in-kind seagrass mitigation, CSA performed aerial and field surveys to identify specific injuries for consideration and potential inclusion into a proposed restoration approach. In May 2010, CSA performed a qualitative aerial survey from a helicopter and collected digital photographs to confirm locations of individual seagrass injuries. The images were used to create a base map of injuries and support the quantitative field survey. Subsequent to the aerial survey, CSA conducted a reconnaissance of both shallow injuries (< 20 cm deep) that would not require sediment fill and deeper injuries (> 20 cm) in need of sediment fill and confirmed suitable sites within the “No Name Shoal” area. Inspection of the shallow water injuries revealed that both *Halodule wrightii* (shoal grass) and *Syringodium filiforme* (manatee grass) had begun colonizing many of the shallow injury sites, thereby stabilizing the sediments that will likely support re-colonization by the surrounding climax species, *Thalassia testudinum* (turtle grass), over time.

Observations of natural recovery within the shallow injuries verified the assumption that the field survey efforts should be solely focused on the deeper scars (> 20 cm) that would require topographic restoration with sediment fill. Potential sediment fill sites that met the criteria described in Section 2.5 of the SRMP, *Joint FDEP and CSA Field Survey*, were delineated using a Trimble GeoXH GPS unit integrated with a Hyrdolite-XT portable Bluetooth hydrographic survey system.

Short shoot counts of non-injured seagrass habitat adjacent to the proposed restoration sites were also collected and used to estimate seagrass density. The density of *T. testudinum*, the dominant seagrass and target species, is estimated at 1,000 shoots/m². *H. wrightii* and *S. filiforme* are also present in this mixed species community, but at lower densities.

Proposed Mitigation Sites

A total of 17 blowholes and depressions (**Figures 1a and 1b**) ranging in size from 20 m² to over 230 m² and covering 0.3 acre (1,214 m²) within the “No Name Shoal” area were identified as suitable for topographic restoration and met the site selection criteria in Section 2.5 of the SRMP. Geo-spatial (ArcView shapefiles) and summarized results from the bathymetric field investigations were provided to FDEP and BISC for review and discussion. A summary of the data including area (m²), estimated volume (yd³) of sediment fill required, and number of bird stakes required according to site is provided in **Table 1**.

Table 1. Proposed seagrass mitigation sites, area (m²), estimated sediment fill volume (yd³), and number of bird stakes in Biscayne National Park.

Biscayne National Park Sites			
Proposed Site	Area (m ²)	Estimated	
		Fill Volume (yd ³)	Bird Stakes
BISC-1	70.5	26.2	18
BISC-2	46.6	17.7	12
BISC-3	98.3	30.6	25
BISC-6	47.8	25.2	12
BISC-7	65.7	30.3	16
BISC-12	67.7	33.1	17
BISC-13	20.5	11.0	5
BISC-14	26.0	23.3	6
BISC-17	31.2	32.3	8
BISC-18	62.7	73.8	16
BISC-19	117.0	63.6	29
BISC-20	65.7	43.6	16
BISC-21	113.6	60.2	28
BISC-22	27.4	16.1	7
BISC-23	236.2	70.4	59
BISC-24	83.7	27.7	21
BISC-25	33.1	20.3	8
Total = 17	1,213.5	605.4	303

Outstanding Mitigation (Village of Key Biscayne)

0.3 acre = 1,214 m²

Restoration Methods

Topographic restoration of each of the proposed restoration sites is the primary method recommended. A sediment fill mixture appropriate for use in BNP will be used to bring each of the seagrass injuries to grade with the surrounding unimpacted area to stabilize the injury and prevent further erosion. A detailed description of the benefits of sediment fill is provided in Section 3.1.2 of the SRMP (CSA International, Inc., 2009). BNP has stated that sediment bagging will not be necessary (Amanda Bourque, personal communication, 10 June 2010); therefore, the fill will be placed as loose fill. Each fill site will also be treated with bird roosting states to encourage natural fertilization and encourage re-growth of seagrasses into the filled sites. A general assumption is that one bird stake/m² will be installed; however, post-fill site conditions will dictate the final number and distribution of bird stakes per site. BNP will select an environmental contractor to develop a site-specific restoration plan based on geo-spatial and bathymetric data provided by CSA, as well as the estimates of volume and bird stakes (**Table 1**) and generally described methods provided within this addendum.

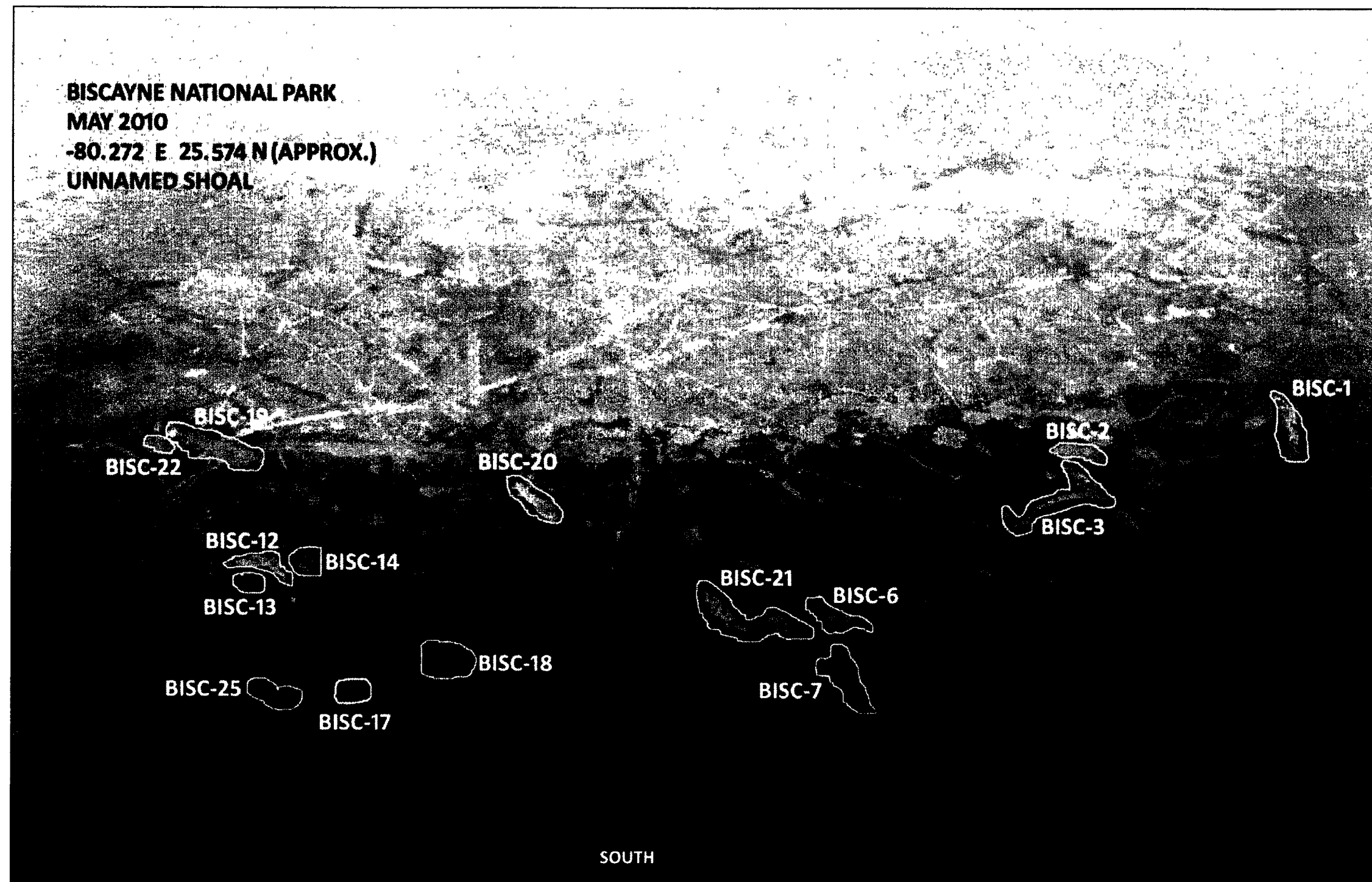


Figure 1a. Proposed mitigation sites in Biscayne National Park.

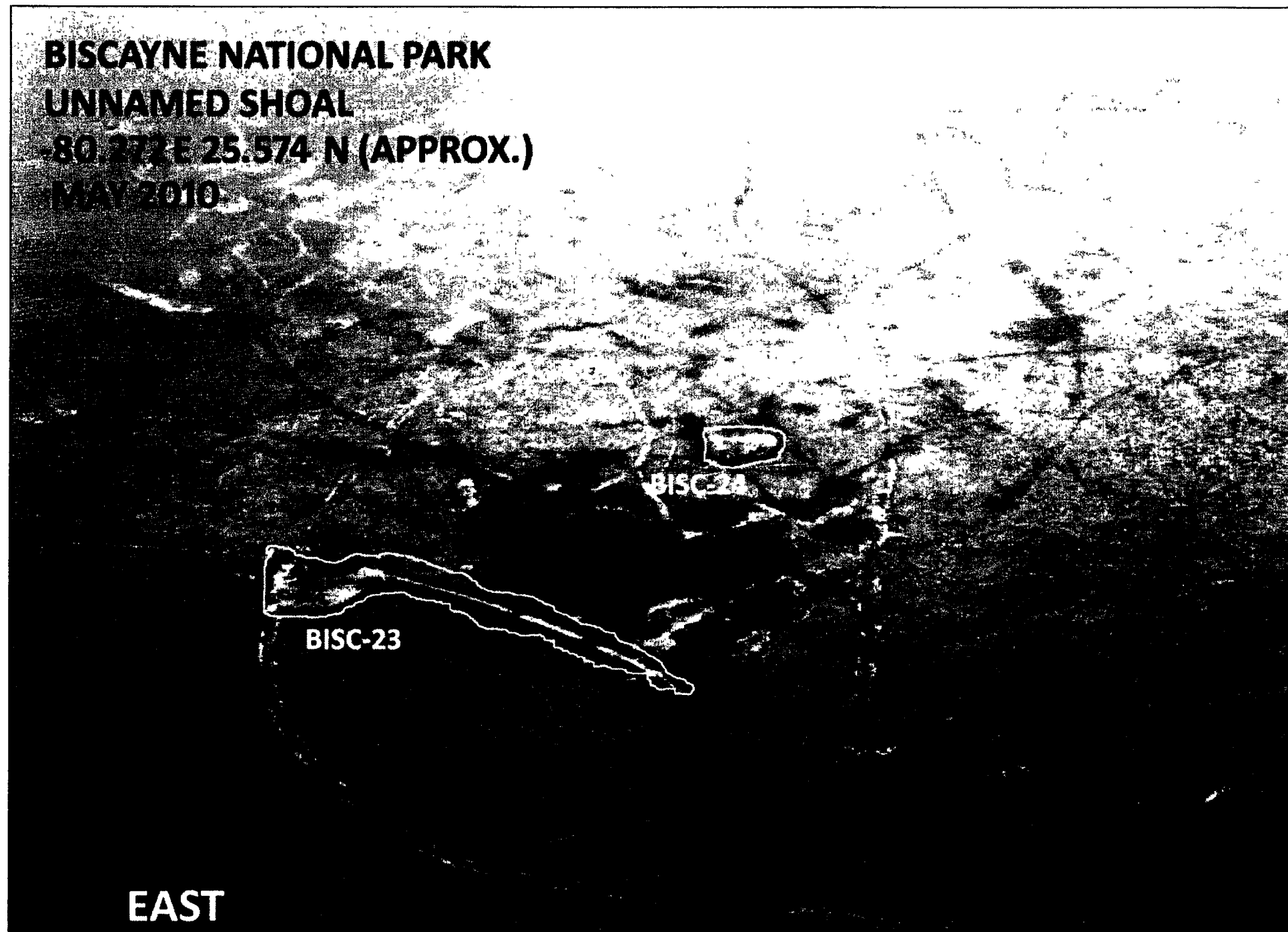


Figure 1b. Proposed mitigation sites in Biscayne National Park.

Monitoring and Success Criteria

Following completion of restoration activities, monitoring will be performed to evaluate the success of the efforts and assess the recovery of the injured areas with respect to ecological function via evaluation of sediment stabilization and colonization by seagrass and macroalgae over time. Pursuant to discussions with BNP and using available data on recovery rates, CSA submitted proposed success criteria in a 2 July 2010 memorandum, which reflected the species composition, density of the target species, and program objectives. Following FDEP review and subsequent discussions both internally and with BNP, the FDEP responded with revised success criteria they would be willing to accept. The success of the BNP seagrass mitigation project will be evaluated using the following criteria:

- *Thalassia testudinum* density (shoots/m²) should reach 50% or greater density within the treatment sites compared to the reference sites.

OR

- *Thalassia testudinum* density (shoots/m²) should reach 30% or greater density within the treatment sites compared to the reference sites, and demonstrate a trending increase at a 95% confidence level; the total coverage-abundance estimates of all seagrass and calcareous green algae species should be 60% or greater compared to the reference sites.

Although these criteria reflect what is believed to be reasonably achievable, limited information is available on recovery rates within BNP due to the infancy of the ongoing seagrass restoration monitoring programs. Anecdotal information from two sites where restoration activities occurred approximately 3 years prior indicates that *T. testudinum* cover (visual canopy) has reached between 27% to 35% of the reference area (Amanda Bourque, personal communication, 18 June 2010).

Monitoring Schedule and Parameters

Monitoring will be conducted by BNP staff and/or contractors for up to 5 years or until the success criteria are met. The monitoring schedule will include a “time zero” (immediately following post-restoration) and annual monitoring surveys to document sediment stability and colonization of the treatment sites by seagrass and calcareous green algae over a specified period of time. The number of monitoring sites will be selected by BNP based on the level of effort calculated into the agreed upon monitoring budget provided to the VKB. Currently, 40% of the sediment fill/bird stake mitigation sites outside BNP are being monitored as part of this program and should be used as a target value if the allocated time allows.

BNP utilizes the Braun-Blanquet method for estimating cover/abundance, while the current monitoring approach required by the FDEP for the VKB project requires direct short shoot counts for estimating density of *T. testudinum*. Short shoot counts will be collected within the restoration treatment sites and surrounding undisturbed (reference) areas. The number of short shoots of *T. testudinum* will be counted from within a gridded 0.0625-m² quadrat (0.25 m x 0.25 m) (sensu Tomlinson and Vargo, 1966). A stratified random approach will be used to ensure quadrat placement is not limited to the central, interior portions of the treatment site and that the edge and near-edge (within 1 m) areas where seagrass in-growth from the surrounding non-impact areas into the treatment sites are evaluated. A minimum of 10 quadrats (data points) per site should be collected while at the larger monitoring locations, up to 20 quadrats (data points) may be appropriate as time and budget allows. To obtain the best estimate and avoid inclusion of nonresident biota in the count, the data collector will remove any drift algae or decaying seagrass leaves prior to data collection to expose attached short shoots.

During each monitoring survey, the community composition and percent cover of seagrass within the restoration treatment sites and reference areas will also be assessed by means of a modified Braun-Blanquet technique (Braun-Blanquet, 1932; Fourqurean et al., 2001; Kenworthy and Schwarzhild, 1997). With this method, the seagrass within a 0.25-m² quadrat (divided into 5 cm x 5 cm grids) will be identified and assigned a cover-abundance scale value as presented in **Table 2**. The percent cover per individual species and the total seagrass cover will be determined by averaging the Braun-Blanquet scores by species and total cover over all quadrats assessed within each treatment site and reference area. Additionally, qualitative digital photographs and/or video data will be collected to document the site conditions and seagrass recovery. Qualitative observations of sediment and bird stake stability will also be noted to determine if any significant physical changes have occurred within the mitigation area.

Table 2. Braun-Blanquet (1932) community composition and percent cover scale values.

Scale Value	Percent Cover
0.0	Not present
0.1	Solitary specimen
0.5	Few with small cover
1	<5%
2	5% to 25%
3	25% to 50%
4	50% to 75%
5	75% to 100%

Private Aid to Navigation

As part of the BNP mitigation project, one Class II Private Aid to Navigation (PATON) will be installed at the eastern end of the “No Name Shoal” per BNP staff requirements. The PATON will serve to mark the shoal, reduce the risk of damage to the restoration efforts, and minimize the risk of new groundings impacting the sites and shoal for the life of the marker. The VKB will support the installation while BNP will contract the sign installation and be responsible for long-term maintenance.

Contingency Plan

As part of the annual monitoring surveys, BNP staff will prepare and submit reports to VKB and FDEP presenting the results of data collection and describing the current site conditions. At the end of the monitoring period, contingency mitigation may be necessary to offset any shortfalls of the mitigation program if either of the following occur: 1) data do not support the mitigation program meeting established criteria or 2) at any point during the monitoring period an unanticipated event substantially alters the physical site conditions, thereby limiting or preventing natural re-colonization of the mitigation sites. The scale and scope of the contingency mitigation will be dependent on the level at which the mitigation failed to meet the goals of the program. FDEP has stated that regardless of the timing or scope of any necessary contingency measure, they will hold the VKB responsible for only one post-restoration remedial event.

Literature Cited

- Braun-Blanquet, J. 1932. Plant Sociology: The Study of Plant Communities. G.B. Fuller and H.S. Conrad, Eds. Koeltz Scientific Books.
- CSA International, Inc. 2009. Seagrass Restoration and Mitigation Plan: Village of Key Biscayne, Second Revision, 31 pp.
- Fourqurean, J., A. Willsie, C.D. Rose, and L.M. Rutten. 2001. Spatial and temporal pattern in seagrass community composition and productivity in south Florida. *Marine Biology* 139:341-354.
- Kenworthy, W.J. and A. Schwarzschild. 1997. Vertical growth and short shoot demography in *Syringodium filiforme* in outer Florida Bay, USA. *Marine Ecology Progress Series* 173:25-37.
- Tomlinson, P.B. and G.A. Vargo. 1966. On morphology and anatomy of turtle grass, *Thalassia testudinum* (Hydrocharitaceae). I. Vegetative morphology. *Bull. Mar. Sci.* 1:748-761.



Florida Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Mimi A. Drew
Secretary

CERTIFIED - RETURN RECEIPT REQUESTED

October 27, 2010

Village of Key Biscayne
85 West McIntyre Street
Key Biscayne, FL 33149

c/o

Penny Cutt, Permitting Manager
Coastal Systems International, Inc.
464 S. Dixie Highway
Coral Gables, FL 33149

Permit Modification No. 0160846-012-JN
Permit No. 0160846-001-JC, Miami-Dade County
Key Biscayne Beach Nourishment Project (Seagrass Mitigation)

Dear Ms. Cutt:

Your request to modify Permit No. 0160846-001-JC was received on July 30, 2010, and has been reviewed by Department staff. The proposed permit modification is to revise Specific Condition No. 14 to incorporate a final seagrass mitigation plan for previous impacts.

The following information describes the project history from the time of original permit issuance, and the subjects directly related to the proposed modification. For additional background, please see the *Consolidated Notice of Intent to Issue* for Joint Coastal Permit (JCP) No. 0160846-001-JC, dated April 21, 2000, available at the Bureau website:
www.dep.state.fl.us/beaches/permitting/dade.htm

Project Area History

The beaches at Key Biscayne were first restored in 1987, under DER Permit No. **13-0302989**, with the placement of approximately 420,000 cubic yards of material between DEP Reference Monuments R-101 and R-113. In 1998 the Department issued Coastal Construction Control Line Permit No. DA-372, which authorized the placement of approximately 36,000 cubic yards of sand between R-101 and R-108, above the mean high water line, via truck haul.

On June 2, 2000, the Department issued Joint Coastal Permit No. **0160846-001-JC**, which authorized a beach nourishment project along 6,850 feet of shoreline in central Key Biscayne.



Notice of Permit Modification
Permit Modification No. 0160846-012-JN
Key Biscayne Beach Nourishment (Seagrass Mitigation)
Page 2 of 10

Approximately 100,000 cubic yards of material were placed between DEP Reference Monuments R-101 and R-108. The beach fill template had a typical berm elevation of +7.0 feet NGVD, a dune elevation of +9.0, an average construction berm width of 35 feet, and a construction foreshore slope of 1:10 (vertical:horizontal). Three borrow areas, located approximately 4,000 feet offshore of the southern tip of Key Biscayne, were authorized for use in this project.

The DEP Southeast District Office issued eight exemptions at this location (File Nos. 0160846-002-EE through 0160846-009-EE). However, these exemptions were not related to the Key Biscayne Beach Nourishment Project, so they are not discussed in detail here.

On February 19, 2008, the Department issued Permit Modification No. **0160846-010-EM**, which authorized the use of an upland sand source (delivered via truck-haul) to restore the dune during the 2008 Key Biscayne Beach Nourishment event. In 2008, the Permittee used this modification to place approximately 2,400 cubic yards of beach-quality material between R-103 and R-107, above mean high water, within the previously authorized beach template. This modification included deadlines for submittal of a seagrass mitigation plan and implementation of seagrass mitigation for previous project impacts. The modification also increased the associated mitigation acreages if the mitigation deadlines were not met.

On April 8, 2008, the Department issued Permit Modification No. **0160846-011-EM**, which revised the sea turtle lighting conditions of Permit No. 0160846-001-JC to allow for a phased approach to implementing the sea turtle lighting ordinance.

On July 30, 2010, the Village of Key Biscayne applied for the subject permit modification to revise Specific Condition No. 14 of the current permit (No. 0160846-001-JC). The application included a revised seagrass mitigation plan (and an addendum) to offset the previous project impacts. The modification incorporates the final seagrass mitigation plan and addendum into the permit. The modification also includes success criteria for the mitigation project.

Justification and Staff Assessment

The Village of Key Biscayne is in the process of completing the requirements for seagrass mitigation. A total of 1.33 acres of mitigation are needed to fulfill the requirements of the permit, of which 1.03 acres has been completed. The remaining 0.3 acres of seagrass mitigation will be completed according to the revised mitigation plan and addendum, which was approved by the Department on August 10, 2010. This permit modification is necessary to incorporate the revised seagrass mitigation plan (with the addendum) and the success criteria for the remaining 0.3 acres of mitigation into the permit. The Department required the Permittee to complete this step prior to the next nourishment event.

Notice of Permit Modification
Permit Modification No. 0160846-012-JN
Key Biscayne Beach Nourishment (Seagrass Mitigation)
Page 3 of 10

The Activity Description and Activity Location shall be revised as follows (~~strike throughs~~ are deletions, underlines are additions):

ACTIVITY DESCRIPTION:

For the initial nourishment event under this permit, Approximately 100,000 cubic yards of sand is to be placed along 6,850 feet of shoreline in central Key Biscayne between DEP reference monuments R-101 and R-108. The beach fill will have a typical berm elevation of +7.0 feet NGVD, dune elevation of +9.0 feet NGVD, average construction berm width of 35 feet, and a construction foreshore slope of 1 vertical to 10 horizontal. Fill material will be excavated from among three offshore borrow sites located approximately 4,000 feet offshore from the southern tip of Key Biscayne. Subsequent renourishment events are expected to occur every eight to ten years, using the same offshore borrow sources.

The 2008 event consists of a truck-haul dune restoration project. Approximately 2,400 cubic yards of beach-quality material will be placed between R-103 and R-107, above mean high water within the previously authorized beach template.

The 2011/2012 event consists of a nourishment project using the previously authorized borrow areas. Approximately 75,000 cubic yards of beach-quality material will be placed between R-101 and R-208, above and below the mean high water within the previously authorized beach template.

ACTIVITY LOCATION:

The nourishment activity is located in central Key Biscayne, Miami-Dade County, Section 33, Township 54 ~~South~~North, Range 42 East, within the Atlantic Ocean, Class III Waters. Mitigation activities within the Biscayne Bay Aquatic Preserve are located directly west of Section 29, Township 58 South, Range 41 East (Site A), Section 8, Township 55 South, Range 42 East (Site B) and Section 29, Township 54 South, Range 42 East (Site D). Mitigation Activities within Biscayne National Park are located directly East of Section 11, Township 56 South, Range 40 East. All mitigation activities are within Biscayne Bay, Miami-Dade County, Class III waters, Outstanding Florida Waters.

SPECIFIC CONDITIONS:

The specific conditions shall be revised as follows (~~strikethroughs~~ are deletions, underlines are additions):

14. The Permittee shall adhere to the October 2009 Second Revised Seagrass Restoration and Mitigation Plan, including the July 2010 Addendum, approved by the Department on August 10, 2010. The details below are addressed by or shall supplement the approved Mitigation Plan.
- a. The following shall apply for portions of the mitigation project within the boundaries of the Biscayne National Park (BNP).
- i. A minimum of 0.3 acres of seagrass shall be restored through the placement of fill and bird stakes
- ii. The success of the portion of the mitigation project within the boundaries of the BNP shall be determined based on the following criteria:
- *Thalassia testudinum* density (shoots/m²) of 50% more within the treatment sites compared to the reference sites based on short shoot count
- OR
- *Thalassia testudinum* density of 30% or more within the treatment site compared to the reference site, and demonstrate a trending increase at 95% confidence level. The total Braun-Blanquet coverage of all seagrass and calcareous green algae species of 60% or greater compared to the reference sites.
- iii. Restoration and monitoring work within the boundaries of the BNP may be conducted or contracted by Park staff according to an agreement executed between the Permittee and the Biscayne National Park. The Department will not hold the Permittee accountable for terms of the BNP agreement that the Permittee does not have the ability to control.
- iv. In the event that contingency mitigation is required, the Village shall only be responsible for one remedial event.

Notice of Permit Modification
Permit Modification No. 0160846-012-JN
Key Biscayne Beach Nourishment (Seagrass Mitigation)
Page 5 of 10

- b. The following success criteria shall apply for the 0.10 acres of restoration (planting units and bird stakes) that was completed outside of the Biscayne National Park prior to 2010:
 - i. *Thalassia testudinum* density shall reach similar densities within the treatment sites as compared to the reference sites within the monitoring period.
- c. The following success criteria shall apply for the 0.32 acres of restoration (bird stakes only) that was completed outside of the Biscayne National Park prior to 2010:
 - i. The reduction in scar width in the treatment sites shall be 50% greater than in the control scar sites within 2 years at a 95% confidence interval; or,
 - ii. *Thalassia testudinum* density shall reach similar densities within the treatment sites as compared to the reference site within the monitoring period.
- d. The following success criteria shall apply for the 0.61 acres of restoration (sediment fill and bird stakes) that was completed outside of the Biscayne National Park prior to 2010:
 - i. For prop scars and narrow injuries that are less than one (1) meter wide, *Thalassia testudinum* density shall reach similar densities within the treatment sites as compared to the reference site within the monitoring period; and,
 - ii. For blowholes and wider injuries that are greater than 1 meter *Thalassia testudinum* density should be trending towards similar densities ($\geq 50\%$ of the *T. testudinum*) within the treatment sites as compared to the reference sites at a 95% confidence interval within the monitoring period.
- e. The following shall apply for all portions of the mitigation project.
 - i. Monitoring of the mitigation sites will be done for at least 5 years or until the success criteria are met, whichever is later.
 - ii. The Permittee may propose or the Department may require contingency mitigation if:

Notice of Permit Modification
Permit Modification No. 0160846-012-JN
Key Biscayne Beach Nourishment (Seagrass Mitigation)
Page 6 of 10

- monitoring data does not satisfy the mitigation success criteria after at least 5 years of post-restoration monitoring, but not more than 7 years; or,
- at any point during the monitoring program an unanticipated event substantially alters the physical site conditions and limits or prevents natural re-colonization of the mitigation sites.

iii. The monitoring requirements, including timelines, shall be reinitiated if subsequent portions of the beach restoration or enhancement project causes additional seagrass impacts and requires contingency mitigation unless otherwise noted in a mitigation plan amendment that has been approved by the Department.

~~14. If the injury areas identified in a Mitigation Plan to be approved by the Department are not regraded using the sediment restoration/stabilization plan prior to May 1, 2008, the permittee shall actively restore 50% of the required mitigation area (0.63 acres) by planting *H. wrightii* prior to August 31, 2008. If planting is required due to non-compliance with the sediment restoration deadline, a seagrass planting plan shall be submitted to the Department by May 30, 2008 for review and approval. If this timeline is not met, the required mitigation area shall increase to 1.33 acres due to the increased t factor of 16 to 20 years and the permittee shall plant the entire mitigation area (1.33 acres) with *H. wrightii* during the 2009 growing season (prior to June 30, 2009).~~

After thorough review of your application, staff finds that the proposed modification is not expected to adversely affect water quality and the project is expected to remain clearly in the public interest. Staff has also determined that the proposed alteration does not increase the potential for adverse impact on the coastal system, public beach access seaward of the mean high water line or nesting sea turtles and hatchlings and their habitat, and that the proposed alteration does not reduce the design adequacy of the project. Since the proposed modification is not expected to result in any adverse environmental impact or water quality degradation, the **permit is hereby modified** as stated above. By copy of this letter and the attached drawings, we are notifying all necessary parties of the modification.

In addition to previous proprietary authorization granted under this permit, the seagrass mitigation activity outside the Biscayne National Park also require a proprietary authorization, as the activity is located on sovereign submerged lands held in trust by the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees), pursuant to Article X, Section 11 of the Florida Constitution, and Sections 253.002 and 253.77, F.S. The activity is not exempt from the need to obtain a proprietary authorization. The Board of Trustees delegated the Department the responsibility to review and take final action on this request for proprietary authorization in accordance with Section 18-21.0051, F.A.C., and the Operating Agreements executed between

Notice of Permit Modification
Permit Modification No. 0160846-012-JN
Key Biscayne Beach Nourishment (Seagrass Mitigation)
Page 7 of 10

the Department and the water management districts, as referenced in Chapter 62-113, F.A.C. This proprietary authorization has been reviewed in accordance with Chapter 253 and Chapter 258, F.S., Chapter 18-18, Chapter 18-21 and Section 62-343.075, F.A.C., and the policies of the Board of Trustees.

As staff to the Board of Trustees, the Department has reviewed the project described above, and has determined that the seagrass mitigation activity qualifies for a Letter of Consent to use sovereign, submerged lands, as long as the work performed is located within the boundaries as described herein and is consistent with the terms and conditions herein. Therefore, consent is hereby granted, pursuant to Chapter 253.77, F.S., to perform the activity on the specified sovereign submerged lands.

This letter of approval does not alter the **June 2, 2020**, expiration date, other Specific or General Conditions, or monitoring requirements of the permit. This letter and the accompanying drawings must be attached to the original permit.

This permit is hereby modified unless a sufficient petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, Florida Statutes, as provided below. The procedures for petitioning for a hearing are set forth below. Mediation under Section 120.573, F.S., is not available for this proceeding.

NOTICE OF RIGHTS

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received by the clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

Because the administrative hearing process is designed to redetermine final agency action on the application, the filing of a petition for an administrative hearing may result in further modification of the permit or even a denial of the application. If a sufficient petition for an administrative hearing or request for an extension of time to file a petition is timely filed, this permit modification automatically becomes only proposed agency action on the application subject to the result of the administrative review process. Accordingly, the applicant is advised not to commence construction or other activities under this permit modification until the deadlines noted below for filing a petition for an administrative hearing or request for an extension of time has expired.

Under Rule 62-110.106(4), Florida Administrative Code, a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General

Notice of Permit Modification
Permit Modification No. 0160846-012-JN
Key Biscayne Beach Nourishment (Seagrass Mitigation)
Page 8 of 10

Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, before the applicable deadline. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon. If a request is filed late, the Department may still grant it upon a motion by the requesting party showing that the failure to file a request for an extension of time before the deadline was the result of excusable neglect.

In the event that a timely and sufficient petition for an administrative hearing is filed, other persons whose substantial interests will be affected by the outcome of the administrative process have the right to petition to intervene in the proceeding. Any intervention will be only at the discretion of the presiding judge upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant must be filed within 14 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the notice or within 14 days of receipt of the written notice, whichever occurs first.

Under Section 120.60(3), F.S., however, any person who has asked the Department for notice of agency action may file a petition within 14 days of receipt of such notice, regardless of the date of publication.

The petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition for an administrative hearing within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S. In accordance with Rule 28-106.201, F.A.C., a petition that disputes the material facts on which the Department's action is based must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests are or will be affected by the agency determination;
- (c) A statement of when and how the petitioner received notice of the agency decision;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;

Notice of Permit Modification
Permit Modification No. 0160846-012-JN
Key Biscayne Beach Nourishment (Seagrass Mitigation)
Page 9 of 10

- (e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
- (f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts on which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C. Under Sections 120.569(2)(c) and (d), F.S., a petition for administrative hearing must be dismissed by the agency if the petition does not substantially comply with the above requirements or is untimely filed.

This action is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above. Upon the timely filing of a petition this order will not be effective until further order of the Department.

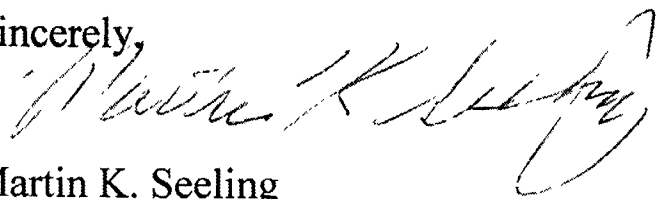
This permit modification constitutes an order of the Department. The applicant has the right to seek judicial review of the order under Section 120.68, F.S., by the filing of a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000; and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days from the date when the final order is filed with the Clerk of the Department.

When there has been no publication of notice of agency action or notice of proposed agency action as prescribed in Rule 62-110.106, F.A.C., a person may request a copy of the agency action. The Department shall upon receipt of such a request, if agency action has occurred, promptly provide the person with notice. The Department does not require notice of this agency action to be published. However, the applicant may elect to publish notice as prescribed in Rule 62-110.106, F.A.C., which constitutes notice to the public and establishes a time period for submittal of any petition.

Notice of Permit Modification
Permit Modification No. 0160846-012-JN
Key Biscayne Beach Nourishment (Seagrass Mitigation)
Page 10 of 10

If you have any questions regarding this matter, please contact Stephanie Gudeman at the letterhead address (add Mail Station 300) or by telephone at (850) 414-7798.

Sincerely,



Martin K. Seeling
Environmental Administrator
Bureau of Beaches & Coastal Systems

MKS/smg

Enclosures: Second Revised Seagrass Restoration and Mitigation Plan (October 2009)
Addendum to Seagrass Restoration and Mitigation Plan (July 2010)

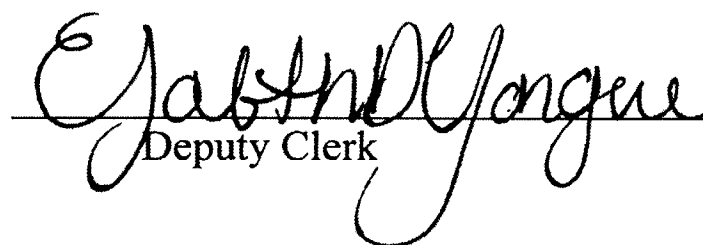
cc (via e-mail):

Chip Iglesias, Village of Key Biscayne
Ann McCarthy, CSA, Inc.
Amanda Bourque, Biscayne Natl. Park
Robbin Trindell, FWC, ISMS
Ron Mezich, FWC, M/ESS
Michael Barnett, BBCS-Chief
Steven Macleod, BBCS-JCP
Robert Brantly, BBCS-CE
Pamela Sweeney, DEP, Biscayne Bay A.P.
Robert Yero, Bill Bags Cape Florida State Park

Jennifer Smith, DEP, SE District
JCP Compliance Officer
Elizabeth Kromhout, BBCS-CE
Roxane Dow, BBCS-BECP
Paden Woodruff, BBCS-BECP
Alex Reed, BBCS-BECP
Wesley Cich, BBCS-CCCL
Pat Wells, John Pennecamp State Park
BBCS File

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

 10/27/10
Deputy Clerk Date